

AMENDMENT TO THE CLAIMS

The following is a listing of the claims and their status. Please cancel claims 1-43, and accept and enter the newly presented claims.

Claims 1-43 (canceled)

44. (new) An orthotic plantar fascia support device for providing support to, and reducing stress on, the plantar fascia of a human foot, comprising:

a thin flexible stretch-resistant device having a sole engaging surface sized and shaped to engage the outer skin tissue on the sole of the foot and extend along the plantar fascia region of the foot from about the ball of the foot to the heel of the foot for providing support to the plantar fascia region of the foot;

an adhesive layer on said sole engaging surface for adhering said device directly to the outer skin tissue on the sole of the foot, and a protective cover removably disposed over said adhesive layer which, when removed, exposes said adhesive layer;

said stretch-resistant device sufficiently stretch-resistant to restrict extension and stretching of the outer skin tissue on the sole of the foot, when adhered thereto, such that tension forces applied to the plantar fascia from forces on the arch of the foot which push the bones of the foot downwardly are shared with said device to restrict stretching of, and reduce tension in, the plantar fascia.

45. (new) The device according to claim 44, wherein

said stretch-resistant device has a uniform thickness of less than about 30 mils (0.762 mm).

46. (new) The device according to claim 44, wherein

said stretch-resistant device is formed of a fabric material having a uniform thickness of less than about 30 mils (0.762 mm).

47. (new) The device according to claim 44, wherein
said stretch-resistant device has less than 15% elongation when subjected to a tensile load (lb/in-width) approximately equivalent to 25 pounds/inch in accordance with ASTM D3759.

48. (new) The device according to claim 44, further comprising:
a thin flexible stretch-resistant arch strap having opposed ends extending laterally outward from opposite sides of said stretch-resistant device in a position to at least partially encircle the talus, the navicular, the cuneiform, and the cuboid region of the foot;
an adhesive layer on said arch strap for adhering said arch strap directly to the outer skin tissue on the sides and top of the arch of the foot, and a protective cover removably disposed over said adhesive layer which, when removed, exposes said adhesive layer;
said arch strap, when adhered to the outer skin tissue on the sides and top of the arch of the foot, providing resistance to vertical and lateral movement of the talus, the navicular, the cuneiform, and the cuboid of the foot and reducing vertical and lateral tension forces applied to the plantar fascia from forces on the arch of the foot which push the bones of the foot downwardly.

49. (new) The device according to claim 48, wherein
said stretch-resistant arch strap is secured to said device by an adhesive.

50. (new) The device according to claim 48, wherein
said stretch-resistant arch strap is integrally formed with said device.

51. (new) The device according to claim 44, further comprising:
at least one thin flexible stretch-resistant heel strap extending rearwardly from said sole engaging surface of said device;
an adhesive layer on said heel strap for adhering said heel strap directly to the outer skin tissue on the back of the heel of the foot, and a protective cover removably disposed over said adhesive layer which, when removed, exposes said adhesive layer;
said stretch-resistant heel strap, when adhered to the outer skin tissue of the heel of the foot providing support to the heel of the foot to reduce tension forces transferred between the heel and the plantar fascia.

52. (new) The device according to claim 51, wherein
said stretch-resistant heel strap is integrally formed with said device.

53. (new) The device according to claim 44, further comprising:
a thin flexible stretch-resistant front strap having opposed ends extending laterally outward from opposite sides of said stretch-resistant device in a position to at least partially overlap the top of the foot above the ball portion of the foot;
an adhesive layer on said arch strap for adhering said front strap directly to the outer skin tissue on sides and top of the ball portion of the foot, and a protective cover removably disposed over said adhesive layer which, when removed, exposes said adhesive layer;
said stretch-resistant front strap, when adhered to the outer skin tissue on the sides and top of the ball portion of the foot providing support to the area adjacent to the ball of the foot to reduce tension forces transferred between the ball of the foot and the plantar fascia.

54. (new) The device according to claim 53, wherein
said stretch-resistant front strap is integrally formed with said device.

55. (new) The device according to claim 44, wherein
said sole engaging surface includes a medicinal agent selected from the group consisting of anti-fungal agents, anti-microbial agents, anti-inflammatory agents, and deodorants, and tea tree oil.

56. (new) An orthodic foot support device for providing support to, and reducing stress on, the plantar fascia of a human foot, comprising:

a thin flexible foot support device having a substantially stretch-resistant sole engaging surface sized and shaped to engage the sole of the foot, and an adhesive layer on said sole engaging surface for adhering said sole engaging portion directly to the outer skin surface of the sole of the foot; and

at least one thin flexible stretch-resistant strap having an end extending outward from said sole engaging surface, and an adhesive layer on said strap for adhering said strap directly to the outer skin surface adjacent to the sole of the foot; whereby

said device and said strap, when adhered to the outer skin surfaces of the sole and adjacent to the sole of the foot, provides support to the plantar fascia region of the foot by restricting extension and stretching of the outer skin tissues of the foot surfaces when adhered thereto so that tension forces applied to the plantar fascia from forces on the arch of the foot which push the bones of the foot downwardly are shared with said sole engaging portion and said strap to restrict stretching of, and reduce tension in, the plantar fascia.

57. (new) The device according to claim 56, wherein

said at least one thin flexible stretch-resistant strap comprises an arch strap having at least one end extending laterally outward from a side of said stretch-resistant device in a position to engage the sides and at least a portion of the top of the arch of the foot so as to at least partially encircle the talus, the navicular, the cuneiform, and the cuboid region of the foot;

said arch strap, when adhered to the outer skin surfaces on the sides and top of the arch of the foot, providing resistance to vertical and lateral movement of the talus, the navicular, the cuneiform, and the cuboid of the foot and reducing vertical and lateral tension forces applied to the plantar fascia from forces on the arch of the foot which push the bones of the foot downwardly.

58. (new) The device according to claim 56, wherein

said at least one thin flexible stretch-resistant strap comprises at least one heel strap extending rearwardly from said sole engaging surface of said device, and an adhesive layer on said heel strap for adhering said heel strap directly to the outer skin surface on the back of the heel of the foot;

said stretch-resistant heel strap, when adhered to the outer skin surface of the heel of the foot providing support to the heel of the foot to reduce tension forces transferred between the heel and the plantar fascia.

59. (new) The device according to claim 56, wherein

said at least one thin flexible stretch-resistant strap comprises a front strap having at least one end extending laterally outward from a side of said stretch-resistant device in a position to at least partially overlap the top of the foot above the ball portion of the foot, and an adhesive layer on said arch strap for adhering said front strap directly to the outer skin surfaces on the sides and top of the ball portion of the foot;

said stretch-resistant front strap, when adhered to the outer skin surfaces on the sides and top of the ball portion of the foot providing support to the area adjacent to the ball of the foot to reduce tension forces transferred between the ball of the foot and the plantar fascia.

60. (new) An orthotic plantar fascia support for providing support to, and reducing stress on, the plantar fascia of a human foot, comprising:

a thin flexible stretch-resistant sole engaging member of substantially uniform thickness having a sole engaging surface sized and shaped to engage the outer skin surface on the sole of the foot and extend along the plantar fascia region of the foot from about the ball of the foot to the heel of the foot, an adhesive layer on said sole engaging surface for adhering said sole engaging surface directly to the outer skin tissue on the sole of the foot, and a protective cover removably disposed over said adhesive layer which, when removed, exposes said adhesive layer; and

a thin flexible stretch-resistant arch strap member having a mid portion and opposed ends, an adhesive layer on said arch strap, and a protective cover removably disposed over said adhesive layer which, when removed, exposes said adhesive layer; whereby

said arch strap mid portion is adhered to an underside of said sole engaging member with said opposed ends extending laterally outward from opposite sides thereof and said opposed ends are adhered directly to the outer skin tissue on the sides and top of the arch of the foot in a position to at least partially encircle the talus, the navicular, the cuneiform, and the cuboid region of the foot;

said stretch-resistant sole engaging member sufficiently stretch-resistant to restrict extension and stretching of the outer skin tissue on the sole of the foot, when adhered thereto, to provide support to the plantar fascia region of the foot by restricting extension and stretching of the outer skin tissue when adhered thereto so that tension forces applied to the plantar fascia from forces on the arch of the foot which push the bones of the foot downwardly are shared with said sole engaging member to restrict stretching of, and reduce tension in, the plantar fascia; and

said arch strap, when adhered to said outer skin tissue on the sides and top of the arch of the foot, providing resistance to vertical and lateral movement of the talus, the navicular, the cuneiform, and the cuboid of the foot and reducing vertical and lateral tension forces applied to the plantar fascia from forces on the arch of the foot which push the bones of the foot downwardly.

61. (new) The support according to claim 60, further comprising:

at least one thin flexible stretch-resistant heel strap extending rearwardly from said sole engaging surface of said sole engaging member, and an adhesive layer on said heel strap; wherein

said heel strap is adhered to the outer skin tissue on the back of the heel of the foot to provide support to the heel of the foot and reduce tension forces transferred between the heel and the plantar fascia.

62. (new) A method for reducing stress on the plantar fascia of a human foot, comprising the steps of:

providing a thin flexible stretch-resistant device of substantially uniform thickness having a sole engaging surface sized and shaped to engage the outer skin tissue on a portion of the sole of the foot in a region of the foot from the heel of the foot to the proximal end of the toes, and an adhesive layer on said sole engaging surface for adhering said device to the outer skin tissue on the sole of the foot, said stretch-resistant device sufficiently stretch-resistant so as to restrict extension and stretching of the outer skin tissue when adhered thereto;

adhering said sole engaging surface to the outer skin tissue on the sole of the foot to extend from the heel of the foot to at least the midportion of the foot to provide support to the plantar fascia region of the foot such that tension forces applied to the plantar fascia from forces on the arch of the foot which push the bones of the foot downwardly are shared with said device to restrict stretching of, and reduce tension in, the plantar fascia.

63. (new) The method according to claim 62, comprising the further steps of:

adhering opposed ends of a thin flexible stretch-resistant arch strap extending laterally outward from opposite sides of said stretch-resistant device to the outer skin tissue on the sides and top of the arch of the foot in a position to at least partially encircle the talus, the navicular, the cuneiform, and the cuboid region of the foot so as to provide resistance to vertical and lateral movement of the talus, the navicular, the cuneiform, and the cuboid of the foot and reduce vertical and lateral tension forces applied to the plantar fascia from forces on the arch of the foot which push the bones of the foot downwardly.

64. (new) The method according to claim 63, wherein

said steps of adhering said arch strap include a preliminary step of adhering a midportion of said arch strap to an underside of said device, and thereafter

adhering said opposed ends of said arch strap to the outer skin tissue on the sides and top of the arch of the foot in a position to at least partially encircle the talus, the navicular, the cuneiform, and the cuboid region of the foot.

65. (new) The method according to claim 62, comprising the further steps of:

adhering a thin flexible stretch-resistant heel strap extending rearwardly from said sole engaging surface of said device to the outer skin tissue on the back of the heel of the foot so as to provide support to the heel of the foot to reduce tension forces transferred between the heel and the plantar fascia.

66. (new) The method according to claim 62, wherein

said sole engaging surface is sized and shaped to engage the outer skin tissue on a portion of the sole of the foot in a region of the foot from about the heel of the foot to about the ball portion of the foot, and comprising the further steps of:

adhering opposed ends of a thin flexible stretch-resistant front strap extending laterally outward from opposite sides of said stretch-resistant device to the outer skin tissue on the sides and top of the ball portion of the foot in a position to overlap at least a portion of the top of the foot above the ball portion of the foot so as to provide support to the area adjacent to the ball of the foot to reduce tension forces transferred between the ball of the foot and the plantar fascia.